

Economies of Scale



Steve Plimmer is a chef who owns a restaurant in Wolverhampton. He has been working on his own for a year now and is worried about the financial security of his business. The restaurant is open for 52 weeks a year for 6 days a week. Custom varies from month to month but on average he serves 50 customers per day. Customers spend on average £5 per head.

At current prices, food costs account for half the price of a meal. So, a £5 meal would cost Steve £2.50 in food. In addition, he pays himself an annual salary of £8000. His wife and two part time employees act as waitresses and are paid a total of £11 000 per year. Other overheads include paying off the bank loan on the property, rates, electricity and crockery. These amount to £20 000 per year. On a

daily basis, this means that Steve is faced with these costs:

Food (50 meals)	£125.00
Wages	£ 60.90
Overheads	£ 64.10
Total	£250.00

Steve's restaurant is big enough to seat a maximum of 60 people at any one time.

STUDY POINTS

Assume in questions 1 to 7 that the price of a meal per customer averages £5.

- How much on average does it cost to serve a meal?
- Which costs are fixed costs and which are variable costs?
- How much profit does Steve make per day?
- Custom falls to 40 customers a day.
 - What are the total costs facing Steve on the average day?
 - How much on average will it cost to serve a meal?
 - How much profit will Steve now be making?
- If Steve could raise the level of custom to 70 customers a day, he would not have to take on any extra staff, nor pay any extra overheads. What's more, he could save 10% on his food bill by buying in bulk.
 - What would be his daily cost if he served 70 customers?
 - What would be the average cost per customer of providing a meal?
 - What would Steve's profit now be?
- Steve could serve a maximum of 200 customers a day. To do this, he would have to take on extra staff, whose cost per day would work out at £50. He could also buy food in bulk and get a 20% reduction in cost compared to the figures for 50 meals a day.
 - What would be his daily cost?
 - What would be the average cost per customer?
 - What would Steve's profit now be?
- Explain why the cost per meal declines as more meals are served per day.
- How could Steve increase the number of meals served per day? Would these measures lead to greater profit?

In Unit 32, economies of scale were said to exist where the average long run cost of production declines as the scale of production increases. Diseconomies of scale exist where the long run average cost of production rises as the scale of production increases. Why is it that this occurs? There are two types of economies of scale: internal and external.

Internal Economies of Scale

INTERNAL ECONOMIES result from the growth in production of the firm itself. Consider the figures in Figure 33.1. Note that costs are expressed here in pounds, but in an index. (Index numbers were explained in Unit 5.)